VOL. XIV, PP. 149-151 AUGUST 9, 1901

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

TWO NEW CATS OF THE EYRA GROUP FROM NORTH AMERICA.

BY EDGAR A MEARNS.

On comparison of the very distinct new species of eyra cat here described as *Felis fossata* with the descriptions of *Felis eyra* Fischer (1814, based on Azara), the former was found to be a much larger animal, the bare skull measuring one-half inch more in length than the entire head of *Felis eyra*, according to the measurements given by Dr. J. R. Rengger,* an extremely careful naturalist. Rengger's external measurements of eyra cats from Paraguay are slightly greater than those given by Azara. The animal described and figured by Baird as *Felis eyra*,† belonged to a species as large as *Felis fossata*, consequently much larger than *Felis eyra* Fischer. The water-color drawing, taken from Dr. Berlandier's original, from which Baird's colored figure was reproduced, depicts the animal "as a uniform light reddish-brown, without any spots whatever, and no lightening of tints beneath. The ears are rather pointed. The tail is slender and tapering gently to the tip, which is not tufted. The tail is rather longer than the body, by about half

*Naturgeschichte der Saeugethiere von Paraguay, 1830, p. 209.

†Mammals of North America, 1857, p. 88, pl. LXII, fig. 1 (animal), pl. LXXIII, fig. 2 (skull); Report United States and Mexican Boundary Survey, II, 1859, p. 10, pl. II, fig. 1 (animal), pl. XIII, fig. 2 (skull).

the length of the neck. The figure also represents the pupil as vertical; other authors describe the pupil of *F. eyra* as round." (Baird.) On account of the larger size of this animal, and the absence of the white or whitish markings on the head, described by Azara,* Fischer, Rengger, and other authors in their accounts of *Felis eyra*, the animal described by Baird under that name must be considered a distinct species, especially now that another species of the eyra (*Felis fossata*) has been found inhabiting Central America. I propose the name *Felis apache* for the eyra cat of Tamaulipas, described by Berlandier and Baird in the works cited. The type will be skull No. 1373, United States National Museum; a youngish-adult female, collected by Dr. Berlandier, at Matamoras in the State of Tamaulipas, Mexico.

Felis fossata sp. nov.

YUCATAN EYRA CAT.

Type.—No. 7036, United States National Museum; skull of adult from Merida, Yucatan, collected by D. Schott.

Cranial characters.—Skull narrow, its greatest diameters 91 by 60 mm.; convex posteriorly, flattened supraorbitally, with marked declination forwards from middle of nasals; interfrontal region with a deep fossa, V-shaped on section, 8 mm. in length, between the anterior extremity of the interfrontal suture and the nasal bones, which latter are similarly infolded, continuing the fossa forward to the extremity of the nasals as a groove which gradually decreases in depth towards their extremity; orbit relatively small; nasal bones narrow, elongated at sides, pointed posteriorly where they are bent downward to form the anterior portion of the frontal fossa; anterior narial opening high and narrow; infraorbital foramen single, and round; interorbital region narrow; jugal broad; posterior narial fossa wide, with a scarcely-perceptible postpalatal notch; audital bullæ elongate, high, pointed anteriorly, scarcely con-

*Azara gives the following: "Length, thirty-one inches; tail, eleven inches and a half, more bushy than that of the cat; and the other measurements proportioned to those of the preceding species [yagüarundi']. The whole coat is of a red colour, except the lower jaw, the mustachios, and a small spot on each side of the the nose, which are white. Its fur does not yield in softness to that of the preceding species [*Felis yaguarundi*], and would be highly esteemed by furriers." (London edition of Azara's Natural History of the Quadrupeds of Paraguay and the River La Plata, 1837, pp. 225-6.)

stricted laterally; sagittal and occipital crests moderately developed; dentition heavy, as compared with *Felis apache*.

Comparison and cranial measurements.—Elliot's account of the cranial characters of *Felis eyra* Fischer,* based on specimen No. 1226, British Museum Collection (locality not given), contains, besides nonessentials, the following: "nasals are broad, and on a line with the processes of the maxillas at their articulation with the frontal bone. * * * Auditory bullæ prominent, oblong; mastoid foramen of a triangular shape. Zygoma well arched. Canines moderate." No cranial measurements are given. The skull of the type and only specimen of *Felis fossata* differs from the above in having the nasals bones narrow, audital bullæ pointed, mastoid foramen oval, zygoma slightly arched, canines large. The skull of *Felis apache* is readily distinguished from that of *F. fossata* by the absence of a frontal fossa, the marked lateral constriction of the audital bullæ, the narrowness of the posterior narial fossa, and the small size of the teeth. It is also noted that the infraorbital foramina are double. The two species are of similar size. The following dimensions of the type skull of *Felis fossata* are followed by those of the type of *F. apache*, in parenthesis: basilar length of Hensel, 78 mm. (76); zygomatic breadth, 60 (60); least interorbital breadth, 16 (19); intertemporal breadth, 30 (32); breadth of braincase above auditory meatus, 42 (41); palate, length from henselion to posterior edge, excluding median notch, 33.7 (32.2); greatest diameter of orbit, 23 (26); greatest length of nasal bone, 23 (20); breadth of nasal bones opposite end of nasal processes of frontals, 7 (8.5); anterior narial orifice, 14 by 12 (12 by 11); breadth of jugal, 10 (7); audital bulla, 20 by 12 (18 by 10); breadth between outer corners of carnassials, 37.2 (33); breadth of posterior narial fossa, 13 (12); front of upper canine to back of carnassial, 27.5 (25); length of upper carnassial, 12.2 (11); length of lower carnassial, 9.4 (8.8).

*Monograph of the Felidæ, 1883, p. 65.

VOL. XIV, PP. 153-155 AUGUST 9, 1901

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

ON THE MAINLAND FORMS OF THE EASTERN DEERMOUSE, *PEROMYSCUS LEUCOPUS* (RAFINESQUE).

BY EDGAR A. MEARNS.

Peromyscus leucopus was originally described by Rafinesque from specimens taken during a journey through "the lower parts of the Ohio, the Wabash, Green River, Barrens, Prairies, and the states of Indiana, Illinois, &c." Kentucky is generally considered to be the type locality.* Specimens from Lexington, Kentucky, collected by the writer and assumed to be typical, are found to agree with those from other parts of the austral zone east of the Mississippi River; but, in the transition zone, fairly well-marked geographical races occur in New York and New England in the East, and in Minnesota in the West. The range of the species does not extend beyond the northern boundary of the transition zone, but meets with that of *Peromyscus canadensis* at the lower edge of the boreal zone. In these forms, which may be recognized by the following descriptions, the under surfaces are white with more or less gray

*In a letter "*dated at Louisville, Falls of Ohio, 20th July,* 1818", published in the American Monthly Magazine, Vol. III, September, 1818, p. 354, Rafinesque states respecting "*Quadrupeds*": "I have discovered and described 3 new species: 1. *Musculus leucopus;* 2. *Gerbillus Sylvaticus;* and, 3. *Noctilio mystax*, Raf."

at the base of the hair, and the general color above is broccoli-brown in summer, and cinnamon or yellowish wood-brown finely sprinkled with black in winter.

Peromyscus leucopus leucopus (Rafinesque).

KENTUCKY DEERMOUSE.

In summer coated with short hairs; color broccoli-brown above, finely sprinkled with black, sparsely on the sides and thickly in a broad median dorsal area; ears scantily coated, hair brown, with scarcely perceptible hoary edges; eyelids bordered with black; feet scantily coated, the skin appearing between the hairs; tail plainly showing annuli above and below, and so scantily coated that it does not appear distinctly bicolored or slightly penciled at tip; underparts gray partly concealed by white tips to the hairs.

In winter more heavily coated; color yellowish wood-brown above, white below, with the gray underfur appearing between the white tips of the hairs; tail very slightly penciled, not very sharply bicolored, and with annuli seldom wholly concealed; feet and ears not well coated.

Measurements.—Total length, 180 mm.; caudal vertebræ, 80; hind foot, 21; ear above crown, 12.5.

Peromyscus leucopus noveboracensis (Fischer).

NEW YORK DEERMOUSE.

In summer the whole animal is more heavily coated than in true *leucopus*, the skin of the feet being concealed by the hair; tail bicolor, with annuli usually concealed, and the tip well penciled; ears also a little more heavily coated; upperparts wood-brown instead of broccoli-brown.

In winter the coat is very full and long; tail moderately penciled, sharply bicolor, heavily coated, with the annuli entirely concealed; ears and feet well coated, the former with hoary edges and almost bushy at base, and the latter pure white; upperparts yellowish wood-brown; ears and upperparts generally more decidedly lined with black; pelage of underparts very dense, and white almost to the base.

Measurements.—Length, 185 mm.; tail vertebræ, 85; hind foot, 21; ear above crown, 13.5.

Peromyscus leucopus minnesotæ subsp. nov.

MINNESOTA DEERMOUSE.

Type.—No. 82,717, United States National Museum Collection. Adult female, collected at Fort Snelling, Hennepin County, Minnesota, November 30, 1890, by Edgar A. Mearns. Original No. 1181.

Characters.—Form stout; ears small, hairy on anterior half of outer surface; color decidedly paler than in the eastern forms; a whitish tuft, in winter, at anterior base of ear; pelage intermediate in length between the two eastern forms; skull as in the typical form.

Color in summer.—Upperparts light bistre, sparingly lined with black hairs; ears with outer surface sepia, hairy anteriorly and almost naked posteriorly, thinly coated with grayish hairs on inner surface, and faintly hoary on edge; feet and tail so scantily clothed that the skin and annuli are visible between the hairs; tail slightly penciled; gray of underparts partially concealed by white-tipped hairs.

In winter the upperparts are cinnamon, coarsely but sparsely lined with black; ears light brown instead of sepia, with a slight tuft of whitish hair at the base anteriorly, and with faint hoary rims; underparts white, the gray underfur being concealed; feet and tail moderately hairy, the latter slightly penciled.

Young mouse-gray above, grayish white below: ears slate-black on anterior band, grayish posteriorly, very faintly edged with hoary; tail hair-brow above, white below.

Measurements.—Length, 175 mm.; tail vertebræ, 75; hind foot, 21.5; ear above crown, 11.5.

VOL. XIV, PP. 157-159 AUGUST 9, 1901

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF THREE NEW ASIATIC SHREWS.*

BY GERRIT S. MILLER, JR.

Among the Asiatic shrews in the United States National Museum are two species that appear to have not yet been named. A third was recently submitted to me for determination by Mr. Oldfield Thomas.

Crocidura ilensis sp. nov.

Type.—Adult female (skin and skull) collected in open grass country at Kukturuk, (altitude, 5400 ft.) Ili, central Asia, October 12, 1899, by P. Church. Original number, 4. Specimen to be presented to the British Museum.

Characters.—In general similar to Kashmir specimens of *Crocidura myoides* (Blanford), but smaller. Color distinctly paler than in the Kashmir animal, the feet nearly white. Skull with more slender rostrum and smaller teeth.

Color.—Dorsal surface pale drab, the hairs drab-gray subterminally and a gray about matching Ridgway's No. 6 (Pl. II) at base. Ventral surface silvery whitish gray in distinct but not sharply defined contrast with color of back. Feet whitish gray. Tail indistinctly bicolor, whitish gray below, drab above.

Skull and teeth.—The skull is distinctly smaller than that of *C. myoides* and *C. russula*, which are of essentially the same size. In form, how-

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ever, it is not peculiar. Teeth as in *C. myoides* but smaller throughout. The unicuspid teeth resemble those of the Kashmir animal in their smaller size and less terete form as compared with those of *C. russula*.

Measurements.—External measurements of type: total length, 85; head and body, 55; tail vertebræ, 30; hind foot, 13; hind foot without claws, 12.

Cranial measurements of type: greatest length, 16.6; greatest postorbital breadth, 8.4; greatest antorbital breadth, 6; least interorbital breadth, 4; mandible, 10; entire maxillary toothrow, 8.4; entire mandibular toothrow, 8.

Specimen examined.—One, the type.

Remarks.—*Crocidura ilensis* agrees with *C. lignicolor* in size, but is very different in color. In the latter character it is almost identical with *C. sicula*, though lacking the faint broccoli-brown wash on the dorsal surface. The skull is only a trifle smaller than that of *C. sicula* and the toothrow as a whole is of about the same length; but the unicuspid teeth are much smaller.

Crocidura shantungensis sp. nov.

Type.—Adult (skin and skull) No. 86,151, United States National Museum. Collected at Chimeh, Shantung, northern China, June, 1898, by Paul D. Bergen.

Characters.—Size and general appearance as in *Crocidura ilensis*, but molar teeth both above and below distinctly smaller.

Color.—In color *Crocidura shantungensis* closely resembles *C. ilensis*, but the feet are less whitish and the dorsal surface is washed with broccoli-brown exactly as in *C. sicula*.

Skull and teeth.—The hinder part of the skull is broken away so that the form cannot be compared with that of the allied species. The rostrum differs from that of *C. ilensis* in greater relative breadth and depth. The teeth are throughout smaller than those of *C. ilensis*, but the difference is most noticeable in the molars. I can detect no tangible differences in form.

Measurements.—External measurements of type (from skin): total length, 87; head and body, 62; tail vertebræ, 25; hind foot, 13 (12).

Cranial measurements of type: entire maxillary toothrow, 7.8; greatest antorbital breadth, 5.4; mandible, 9; entire mandibular toothrow, 7.

Specimen examined.—One, the type.

Remarks.—While this species exactly resembles *C. sicula* in color, it is readily distinguished by its shorter, more bristly tail. In this character it differs from all the known European members of the genus and agrees with the Asiatic *C. myoides*, *C. ilensis*, and *C. lignicolor*.

Sorex macropygmæus sp. nov.

Type.—Adult male (skin and skull) No. 84,012, United States National Museum. No. 8019, Leonhard Stejneger. Collected at Petropaulski, Kamchatka, September 23, 1897, by Mrs. Stejneger.

Characters.—In general appearance similar to *Sorex minutus* but size considerably greater (hind foot, 13, greatest length of skull, 17).

Color.—Upperparts sepia, slightly darker across lumbar region, and becoming paler on sides where a rather abrupt change takes place to the broccoli-brown of the underparts, Tail distinctly bicolor, dark sepia above and at tip, light shining broccoli-brown beneath. Feet like under surface of tail.

Skull and teeth.—The skull throughout is larger than that of *Sorex minutus*, forming in this respect an exact intermediate between that of the pigmy shrew and *Sorex araneus*. In form it is not peculiar.

Teeth as in *Sorex minutus* except that the third and fourth unicuspids are subequal when viewed from the side, that is the fourth is not distinctly smaller than the third as in the case in *S. minutus*.

Measurements.—External measurements of type*: total length, 107; head and body, 70; tail vertebræ, 37; hind foot, 13 (12).

Cranial measurements of type: greatest length, 17.6 (15.4)†; greatest postorbital breadth, 8.4 (7.6); greatest antorbital breadth, 4.4 (4); least interorbital breadth, 3.4 (2.8); mandible, 8 (6.6); entire maxillary toothrow, 7.6 (6.8); entire mandibular toothrow, 7 (6).

Specimens examined.—Three (one in alcohol), all from the type locality.

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*From fresh specimen by collector.

†Measurements in parenthesis are those of an adult *Sorex minutus* from Upsala, Sweden.

VOL. XIV, PP. 161-163 AUGUST 9, 1901

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

SOME NEW AND ADDITIONAL RECORDS ON THE FLORA OF WEST VIRGINIA.

BY CHARLES L. POLLARD AND WILLIAM R. MAXON*.

In the latter part of August, 1899, the writers spent four days in south central West Virginia, making collections of plants at Quinnimont, Fayette Co., and at Lowell, Summers Co., both on the line of the Chesapeake and Ohio Railroad. In view of the extensive additions to the known flora of the state recently published by Mr. E. L. Morris†, supplementing Millspaugh and Nuttall's "Flora of West Virginia‡," it is quite significant of the work yet to be done that out of the total of 125 numbers of our collection 30 should be new to the state,—the majority being cryptogamous plants.

For the determination of the fungi we are indebted to Mrs. Flora W. Patterson; for that of the lichens to the late Thomas A. Williams; of the hepaticae to Dr. Marshall A. Howe; and of the mosses, with one exception, to Mrs. E. G. Britton. The names of species new to the flora are printed in bold-face type; those representing merely additional records, in small capitals.

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†Proc. Biol. Soc. Wash. 13: 171-182. 1900.

‡Field Columb. Mus. Pub. (Bot. Series) 1: 65-276. 1896.

Thallophyta.

FUNGI.

Uromyces Howei Peck. On *Asclepias Syriaca.* Lowell, August 25. (No. 130.)

Gnomonia ulmae (Sacc.) Thum. On dead leaves of *Ulmus* sp. Lowell, August 25. (No. 131.)

Lichenes.

Coenogonium interpositum Nyl. Sterile; growing with thallus of *Cladonia* sp. Quinnimont, August 22. (No. 141.)

Lecidea speirea Ach. Quinnimont, August 21. (No. 134.)

Lecidea albocoerulescens (Wulf.) Schaer. Quinnimont, August 22. (No. 138.)

Pertusaria corallina (L.) Fr. Quinnimont, August 22. (No. 140.)

Parmelia cetrata Ach.? Sterile, but probably referable to this species. Lowell, August 23. (No. 146.)

Parmelia tiliacea (Hoffm.) Flk. Lowell, August 23. (No. 151.)

Cladonia squamosa Hoffm. Quinnimont, August 22. (No. 143.)

Cladonia squamosa denticollis (Hoffm.) Flk. Quinnimont, August 22. (No. 136.)

Placodium rupestre (Scop.) Br. & Rostr. Quinnimont, August 23. (No. 155.)

Theloschistes concolor effusa Tuckerm. Lowell, August 23. (No. 150.)

Verrucaria fuscella (Turn.) Ach. Lowell, August 23. (No. 154.)

Pyrenula punctella (Nyl.) Williams, comb. nov. (*Verrucaria punctella* Nyl. Pyrenoc. 46, 1858.) Lowell, August 23. (No. 156.)

Bryophyta.

HEPATICAE.

Jungermannia Schraderi Mart. Quinnimont, August 22. (No. 113.)

Cephalozia Virginiana Spruce. Quinnimont, August 22. (No. 115*a* in part, which is mostly *C. curvifolia.*)

Musci.

Fissidens subbasilaris Hedw. Lowell, August 23. (No. 117.)

Ditrichum tortile (Schrad.) Hampe. Quinnimont, August 21. (No. 105.)

Thuidium delicatulum (L.) Mitt. Quinnimont, August 21. (No. 111.)

Thuidium minutulum (Hedw.) Br. & Sch. (Determined by Dr. G. N. Best.) Lowell, August 23. (No. 118.)

Amblystegium fluviatile (Sw.) Br. & Sch. Quinnimont, August 21. (No. 110.)

Rynchostegium rusciforme (Neck.) Br. & Sch. Quinnimont, August 21. (No. 109.)

Hypnum Haldanianum Grev. Quinnimont, August 22. (No. 115.)

Pteridophyta.

POLYPODIUM VULGARE DECEPTUM Maxon, Proc. U. S. Nat. Mus. **23**: 628. 1901. Quinnimont, August 21. (No. 25.)

Spermatophyta.

Andropogon nutans avenaceus (Michx.) Hack. (Determined by Mr. Carleton R. Ball.) Common in bottom lands of the New River. Quinnimont, August 21. (No. 36.)

TRAUTVETTERIA CAROLINENSIS (Walt.) Vail. Quinnimont, August 21. (No. 26.) Growing in some abundance along the banks of Laurel Creek; this station confirms its existence in the State, as Doctor Millspaugh questioned the locality cited by him.

Chamaecrista nictitans commixta Pollard, and Maxon var. nov.

Plant of low statute, very densely and divaricately branching, the stems finely pubescent or puberulent; leaves resembling those of nictitans, but often with more numerous leaflets; petiolar gland cupulate or truncate, usually nearly sessile; flowers and fruit as in *C. nictitans*.

Type in U. S. National Herbarium, No. 357,069, collected by Charles L. Pollard and William R. Maxon in alluvial soil along the New River at Quinnimont, W. Va., August 21, 1899. (No. 31.)

Galactia regularis (L.) B. S. P. Quinnimont, August 21. (No. 29.) Bottom lands of the New River.

Strophostyles helvola (L.) Britton. Quinnimont, August 21. (No. 32.) Bottom lands of the New River.

Physalis heterophylla Nees. Quinnimont, August 21. (No. 38.) Bottom lands of the New River.

TAGESTES PATULA L. Quinnimont, August 21. (No. 20.) Escaped from cultivation along the railroad near Laurel Creek.

SOLIDAGO NEGLECTA Torr. & Gray. Quinnimont, August 21. (Nos. 33 and 34.) Bottom lands of the New River. Recently reported by Doctor Millspaugh from another locality in the State.

VOL. XIV, PP. 165-167 AUGUST 9, 1901

PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

NEW AND LITTLE-KNOWN COCCIDÆ. I. RIPERSIELLA AND CEROPUTO.

BY T. D. A. COCKERELL.

Ripersiella Tinsley.

Ripersiella, Tinsley, in Cockerell, Canad. Entom., 1899, p. 274.

Dactylopiine Coccidæ with antennæ of not more than six joints, placed close together at the extreme anterior portion of the head. Type *Ripersiella rumicis* (=*Ripersia rumicis*, Maskell, Tr. N. Z. Inst., XXIV, 37).

Prof. Tinsley had intended to give an account of this genus, but he has been prevented by other duties, and at his suggestion I here set forth its characters. The appearance of the species is very peculiar, and anyone who has seen them alive is sure to be convinced of the validity of the genus.

Ripersiella maritima (=*Ripersia maritima*, Ckll., Insect Life, VII, 42) and *R. leucosoma* come nearer to *Ripersia* than the other two species. *R. Kelloggi* (Ehrh. & Ckll.) from Mountain View, California, departs farthest from the *Ripersia* type, having 5-jointed antennæ only about 75 μ long, and 15 μ apart, the second to fourth joints each about twice as broad as long.

Ripersiella leucosoma sp. n.

♀. Perfectly, white elongated, the largest about 3 mm. long; caudal lobes low and rounded, not at all prominent, with a couple of bristles like those of the anal ring; abdominal segments very convex on lateral margins; legs and antennæ pale reddish-brown; pairs of legs about 400 μ apart; hind legs about 1100 μ from end of body; hind legs with fe-

mur + trochanter about 140 μ, tibia about 90, tarsus about 60; antennæ at extreme anterior end of body, which is somewhat pointed; antennæ 6-jointed, about 120 μ apart, and about 186 μ long; antennal joints in μ, (1.) 30-39, (2.) 18-24, (3.) 30, (4.) 18-21, (5.) 18-21, (6.) 42-48; joints 4 and 5 about as broad as long, with convex sides; formula 6 (31) 2 (45) or 613 (245); mouth-parts (excluding rostral filaments) about 220 μ long; labium narrow but not very long, about 100 μ long and 50 wide.

Hab. Las Vegas, New Mexico, 6400 ft. alt., under rocks with *Lasius americanus;* first found by Wilmatte P. Cockerell, April 11, 1901. A larger insect than *R. maritima*, but closely allied.

Ripersiella kelloggi Ehrhorn & Ckll., sp. n.

This species was found by Mr. Ehrhorn on roots of bunch grass at Mountain View, California, in December, 1898, but no description has yet been published. It is easily recognized by the characters mentioned above. The length of the last antennal joint is about 30 μ. The mouth parts are ordinary, the labium not elongated.

Ceroputo Sulc.

The genus *Ceroputo*, Sulc. was founded in 1897 for a species found in Bohemia, named *C. pilosellæ*, Sulc. It has never been recognized as American, but after a study of its characters, I find that the species of the group of *Phenacoccus yuccæ* are certainly congeneric. The genus is a fairly distinct one by the large size and spiny skin, with a frequent development of waxy lamellæ resembling those of *Orthezia*. The American forms are *Ceroputo yuccæ* (*Pseudococcus yuccæ*, Coquillett, W. Am. Sci., 1890, p. 44), *C. yuccæ mexicanus* (*Dactylopius mexicanus*, Ckll., Ann. Mag. Nat. Hist., (6) XII, p. 49), *C. barberi* (*Phenacoccus yuccæ barberi*; Ckll., Ann. Mag. Nat. Hist., (6) XVI, p. 61), *C. bahiæ* (*Phenacoccus bahiæ*, Ehrhorn, Can. Ent., 1900, p. 314), and *C. calcitectus* (*Phenacoccus calcitectus*, Ckll., Ann. Mag. Nat. Hist., (7) VII, p. 334).

In *C. barberi* the last three antennal joints are decidedly longer than in *C. yuccæ*. To the above must now be added the following:

Ceroputo lasiorum sp. n.

♀. About 4 mm. long, 2⅓ broad, almost white, with a faint greenish tinge, covered with white secretion. The dense secretion covering the dorsum looks like wool, instead of having a chalky appearance as in *C. calcitectus;* it is also not separable into distinct lamellæ, nor are the hindmost lamellæ at all prolonged (in *calcitectus* they form two tails); in young individuals the lateral tufts are distinct. Legs pale reddish-brown; sepia brown in mounted specimens. Boiled in *liquor potassæ*, the ♀ turns pink, but does not stain the liquid.

Skin with many round glands, and small spines; sides with large brownish patches of spines; anal ring with six hairs. Claw with denticle on inner side; no tarsal digitules.

Adult. Measurements of antennæ and legs in μ: Antennal segments: (1.) 90, (2.) 90, (3.) 153, (4.) 96, (5.) 99, (6.) 96, (7.) 92, (8.) 99, (9.) 141. Formula 39(1245678).

Middle leg; femur + trochanter 640; tibia 560; tarsus (without claw) 200. Tarsal bristles about 60 μ.

Penultimate stage. Measurements in μ: Antennal segments: (1.) about 60, (2.) 90, (3.) 126, (4.) 75, (5.) 75, (6.) 75, (7.) 75, (8.) 126. Only 8 joints. Anterior legs; femur + trochanter, 440; tibia 360; tarsus (without claw) 200.

Middle legs; femur + trochanter 460; tibia 400. Posterior legs; femur + trochanter 480; tibia 470; tarsus 200.

Hab.—Las Vegas, N. M., April, in nests of *Lasius interjectus* under rocks. (*Wilmatte P. Cockerell.*)

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PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

DESCRIPTIONS OF A NEW GENUS AND ELEVEN NEW SPECIES AND SUBSPECIES OF BIRDS FROM MEXICO.

BY E. W. NELSON.

The following descriptions are based upon material in the Biological Survey collection and mainly upon specimens obtained during a recent trip to the peninsula of Yucatan by Mr. E. A. Goldman and myself. I am indebted to Mr. Robert Ridgway and Dr. Chas. W. Richmond, Curator and Assistant Curator of Birds in the National Museum, for their usual kind assistance during the preparation of this paper.

All measurements are in millimeters.

Crypturus sallæi goldmani, new subspecies. Yucatan Tinamou.

Type No. 167,715, ♂ ad., U. S. National Museum, Biological Survey collection, from Chichen Itza, Yucatan, Mexico. Collected February 1, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Yucatan, Mexico.

Subspecific characters.— ♂, smaller than typical *C. sallæi* with generally paler coloration; back grayer; the light transverse bars more strongly marked and extending farther forward on back and wings; underparts paler, more buffy (less rufous); ♀, paler and more strongly and extensively barred with light color on back and wings.

Dimensions of type.—Wing 152; tail 46; culmen 27; tarsus 44.

Remarks.—The males of the present form differ more from those of *C. sallæi* both in size and color than do the females.

Bubo virginianus mayensis new subspecies. Yucatan Horned Owl.

Type No. 167,727, ♀ ad., U. S. National Museum, Biological Survey collection, from Chichen Itza, Yucatan, Mexico. Collected February 1, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Peninsula of Yucatan.

Subspecific characters.—Most like *B. virginianus pallescens* but much smaller with less clear gray and more dingy fulvous suffusion on entire dorsal surface including tail; sides of body, flanks and under tail coverts rather regularly barred with narrow dark bands, not crowded near tips of feathers as usual in *pallescens;* sides of flanks with concealed suffusion of dull buffy; middle of breast and belly dull white; lower half of tarsus and feet dull white without markings.

Dimensions of type.—Wing 335; tail 178; culmen 44; tarsus 66.

Remarks.—This is the smallest of the subspecies of *Bubo virginianus* and is a pale race probably limited to the arid part of the peninsula of Yucatan.

Crax chapmani new species. Chapman's Curassow.

Type No. 167,370, ♀ ad., U. S. National Museum, Biological Survey collection, from Puerto Morelos, Eastern Yucatan, Mexico. Collected March 28, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Heavy forests of southern Campeche and southern and eastern Yucatan, Mexico; probably ranging thence into adjacent parts of Belize and Guatemala.

Description of type.—Head and throat dull white thickly and finely speckled with black on lores and around eyes; sides of crown more coarsely and sparingly black spotted; crest white with narrow black tips finely bordered with white; bases of crest feathers on front of crown with small black spots or incomplete bars; posteriorly crest feathers only marked at base with fine dark shafts or shaft streaks; neck all around from head to body strongly barred black and white—black bars broadest, and white bars on underside of neck more or less edged with buffy; shoulders, upper surface of wings and tail broadly and regularly barred with broad bands of blackish brown and slightly narrower bands of golden buffy; dark bars approaching black on shoulders and on outer half of tail; buffy bars with a decided grayish cast on outer half of tail; primaries mainly buffy, paler than same color on secondaries and more narrowly and irregularly barred and spotted with blackish and reddish brown; middle of back and rump narrowly barred with same colors as secondaries and tail; entire underparts including breast, abdomen, sides of body, flanks, thighs and undertail coverts uniform ochraceous buffy —a few narrow irregularly placed transverse blackish brown marks occurring on buffy feathers of fore breast; under side of tail black with narrow golden buffy transverse bars.

Dimensions of type.—Wing 380; tail 368; culmen 51; tarsus 116.

Remarks.—The discovery of this magnificent bird, one of the largest and handsomest of the genus, was a quite unexpected result of our work in Yucatan. Only a single specimen could be secured by us, although the feathers of others were seen about Indian camps in southern Campeche in December, 1900, by Mr. Goldman, and I came on a hunter in the forest in eastern Yucatan just after he had finished plucking one. They were evidently much less common than *Crax globicera*, though they frequent the same forests. Unfortunately we failed to secure a male so this sex remains unknown. The ovaries of the type were becoming enlarged showing that the breeding season was near, at the date of her capture.

The Maya Indians distinguish this species from the Cambúl (*Crax globicera*) and call it Bolonchan or Bolonchana.

It gives me pleasure to dedicate this fine bird to Mr. F. M. Chapman whose interesting 'Notes on Birds observed in Yucatan' (Bull. Am. Mus. Nat. Hist., VIII, 271–290, 1896) is the best local paper we have on the birds of this region.

Nyctagreus* new genus.

Type.—Caprimulgus yucatanicus Hartert, Cat. Birds British Museum, XVI, 575, 1892.

Distribution.—Yucatan and Campeche, Mexico.

Generic characters.—Bill rather long and narrow; nostrils flattened oval, slightly tubular, situated well forward on bill and opening laterally; rictal bristles coarse, scarcely curved at tips; tarsus a little longer than middle toe without claw and bare of feathers except near proximal end, as in *Phalænoptilus;* second and third primaries equal and longest; fourth a trifle shorter; first about 10 mm. shorter than second and about equal to fifth, thus giving a formula very close to *Otophanes;* tail slightly rounded and a little shorter than wing; plumage and color pattern as in *Antrostomus.*

Nyctidromus albicollis yucatanensis new subspecies.

Yucatan Parauque.

Type No. 167,682, ♂ ad., U. S. National Museum, Biological Survey collection, from Tunkas, Yucatan, Mexico. Collected February 17, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Peninsula of Yucatan (including State of Campeche), Mexico.

Subspecific characters.—Larger and grayer than typical *N. albicollis;* a little smaller and darker grayish than *N. albicollis merrilli;* otherwise generally resembles latter in coloration but darker with smaller light

*νύξ=night; ἀγρεύς=hunter.

spots on wing coverts; distal half of outer web of next to outer tail feather white with border of dark brown or blackish, but never wholly or mostly dark as usual in the other forms of this species.

Dimensions of type.—Wing 176; tail 165; culmen 15; tarsus 28.

Remarks.—The broad band of white next to shaft on outer web of next to outer tail feather appears to be a constant character in this form and gives the readiest means of separating it from specimens of *N. albicollis* which approach it in color.

Attila mexicanus new species.

Type No. 166,431, ♂ ad., U. S. National Museum, Biological Survey collection, from Frontera, Tabasco, Mexico. Collected April 27, 1900, by E. W. Nelson and E. A. Goldman.

Distribution.—Tabasco, Eastern Mexico (Metlaltoyuca, northeastern Puebla?).

Specific characters.—Similar to *Attila citreopygius* but larger; Crown and malar area streaked with black; top and sides of neck and back, to rump, dark russet brown; rump rich cinnamon brown shading into ochraceous on upper tail coverts; wing bars and edgings like back; upper side of tail slightly paler brown than back and darkest near tip; chin and throat grayish white streaked with blackish; fore breast flammulated with dull brown streaks edged with dull yellowish; abdomen white with pale rusty shafts; sides of breast like back; sides of body and flanks raw sienna, this color bordering and sharply contrasting with color of abdomen; under tail coverts chrome yellow.

Dimensions of type.—Wing 98; tail 82; culmen 28; tarsus 26.

Remarks.—The type of *Attila mexicanus* is from the coast forests of Tabasco and is the most strongly rufous of any species of the genus known north of Panama. A specimen in our collection from Metlaltoyuca, Puebla, is equally large but is more like *A. citreopygius* in general appearance and probably represents a subspecies of *A. mexicanus*. A specimen from Palenque, Chiapas, is very near to typical *A. citreopygius* in size and color. Two males of the latter species in the National Museum from the Escondido River, Nicaragua, measure as follows viz.: No. 128,332: Wing 92; tail 72; culmen 26; tarsus 24. No. 128,333: Wing 91; tail 71; culmen 24; tarsus 24.

Myopagis yucatanensis new species. Yucatan Flycatcher.

Type No. 167,552, ♀ ad., U. S. National Museum, Biological Survey collection, from La Vega, Yucatan, Mexico. Collected March 22, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Known only from type locality.

Specific characters.—Similar to *Myopagis placens* in coloration but much smaller, with entire crown dull broccoli brown overlying dull gray basal

color of feathers: concealed yellow crown patch very small and limited to part adjoining nape.

Dimensions of type.—Wing 62; tail 56; culmen 10; tarsus 17.

Pachyrhamphus major itzensis new subspecies.

Yucatan Pachyrhamphus.

Type No. 167,766, ♀ ad., U. S. National Museum, Biological Survey collection, from Chichen Itza, Yucatan, Mexico. Collected January 29, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Northern Yucatan.

Subspecific characters.—Smaller and paler than typical *P. major* from Jalapa, Vera Cruz. Compared with *P. major:* ♂, clearer white below, especially on throat and abdomen, with black area on back restricted or almost wanting. ♀, back duller, more grayish brown; underparts paler—a dingy primrose yellow.

Dimensions of type.—Wing 77; tail 57; culmen 14; tarsus 21.

Remarks.—The males show rather stronger differences than the females.

Icterus cucullatus duplexus new subspecies. Island Oriole.

Type No. 167,644, ♂ ad., U. S. National Museum, Biological Survey collection, from Mujeres Island, Yucatan, Mexico. Collected March 24, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Mujeres Island and occasional on adjacent shore of eastern Yucatan.

Description.—Male with close general resemblance to *I. c. nelsoni* but smaller with slightly paler and more chrome yellow underparts; broad frontal band of black bordering bill; decidedly less white on wings. Female: Dingy cadmium yellow like the female of *I. c. igneus*.

Dimensions of type.—Wing 86; tail 90, culmen 18; tarsus 23.

Icterus cucullatus cozumelæ new subspecies.

Cozumel Hooded Oriole.

Type No. 167,652, ♀ ad., U. S. National Museum, Biological Survey collection, from Cozumel Island, Yucatan, Mexico. Collected April 11, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Cozumel Island, Yucatan.

Subspecific characters.—Males similar in color to *Icterus cucullatus igneus* but rather smaller with larger bills. Females decidedly smaller than those of *I. c. igneus* with underparts paler, duller yellow; middle of back grayer; yellow on top of head and rump more greenish or olivaceous.

Dimensions of type.—Wing 74; tail 75; culmen 17; tarsus 23.

Remarks.—Both males and females of this form may be distinguished from *I. c. duplexus* by their deeper coloration.

Stelgidopteryx ridgwayi sp. nov.

Ridgway's Rough-winged Swallow.

Type No. 167,947, ♂ ad., U. S. National Museum, Biological Survey collection, from Chichen Itza, Yucatan, Mexico. Collected January 29, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—Yucatan and other parts of Mexico south of the Isthmus of Tehuantepec, and probably adjacent part of Guatemala.

Description.—Lores with distinct grayish white spots just back of nostrils; rest of upper parts blackish brown, darkest on wings and tail and slightly paler on rump and tertiaries, latter narrowly edged with grayish white (color of upper parts much darker than in *S. serripennis*); throat, breast and sides of body grayish brown, palest on throat, rest of underparts of body white; under tail coverts white with broad black tips to longest coverts; size larger than *S. serripennis* and tail much more deeply emarginate.

Dimensions of type.—Wing 117; tail 57; culmen 9; tarsus 12.

Remarks.—This well marked species was common in Yucatan, living in the caves in the sides of cenotes or natural wells. They were also found about the foothills at Teapa, Tabasco. Its dark back and black tips to under tail coverts render it easily separable from its nearest relative, *Stelgidopteryx serripennis.*

Troglodytes peninsularis new species. Mangrove House Wren.

Type No. 168,115, ♂ ad., U. S. National Museum, Biological Survey collection, from Progreso, Yucatan, Mexico. Collected March 5, 1901, by E. W. Nelson and E. A. Goldman.

Distribution.—The arid coastal belt of northern Yucatan.

Specific characters.—A pallid species with general resemblance to *Troglodytes aedon aztecus* but with heavier bill and feet; shorter wings and tail, and more reddish brown suffusion, especially on underparts. Upperparts dull bister brown, becoming paler and more reddish on rump and tail; throat, middle of breast and abdomen white, lightly suffused with pale fulvous; sides of neck and body strongly suffused with dull reddish brown, darkest on flanks; under tail coverts whitish with narrow blackish bars narrowly bordered with dull reddish brown.

Dimensions of type.—Wing 50; tail 38; culmen 14; tarsus 18.

Remarks.—We found this wren very common among the scattered growth of mangroves over a broad salt flat bordering the lagoon back of Progreso. A few were seen in the brush-grown country adjoining the flats but the latter were apparently their home. They were in full song

the first of March and were about to breed. They were commonly seen probing for food in the clay mud on the flats and all the specimens killed had their feet and bills (to the angle of the gape) coated with dried mud.

Merula plebeia differens new subspecies. Forest Robin.

Type No. 142,532, ♂ ad., U. S. National Museum, Biological Survey collection, from Pinabete, Chiapas, Mexico. Collected February 8, 1896, by E. W. Nelson and E. A. Goldman.

Distribution.—Known only from type locality in southern Chiapas.

Subspecific characters.—Entire upperparts including head, wings and tail decidedly browner than in *M. plebeia;* lower parts more uniform and darker brown; throat uniform with breast with scarcely a trace of dark streaks; feet and bill darker than in *M. plebeia.*

Dimensions of type.—Wing 141; tail 105; culmen 23; tarsus 35.

Remarks.—Seen only in the heavy forest above 7500 feet.

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PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

GENERAL NOTES.

The bat genus Pteronotus renamed Dermonotus.

In 1815, Rafinesque, in his 'Analyse de la Nature' (p. 54), substituted *Pteronotus* in place of *Pteropus*, apparently simply because he did not like the latter name. Of course there was no justification for such a procedure and *Pteronotus* is a pure synonym of *Pteropus*. Nevertheless, the name was given and consequently its use for another genus precluded. However, Gray gave the same name in 1838 to a genus of Phyllostomoid bats, not knowing of its previous use by Rafinesque. As no other has been given to exactly the same type, a new one must be substituted and *Dermonotus* is appropriate, referring to the extension of the skin of the wings and interfemoral membrane upon the back.

Those mammalogists who rank *Pteronotus* and *Chilonycteris* as sections of one comprehensive genus for which the latter name has been used will be more reconciled to the change when they consider that a less serious one will be entailed. It has been generally overlooked that *Pteronotus* was published a year earlier than *Chilonycteris* (1838 instead of 1839) and consequently that name would have to be used instead of *Chilonycteris*, generally employed for the genus. An examination of the types of the two genera has led me to believe that the two groups should be regarded as generically distinct, if current views as to generic differentiation are to be adopted.—*Theodore Gill.*

An addition to the avifauna of the United States.

During the summers of 1892 and 1893, when accompanying the party then engaged in surveying and re-marking the boundary line between Mexico and the United States, Mr. Frank X. Holzner and I found the

Mexican Cliff Swallow, *Petrochelidon melanogaster* (Swainson), in abundance in the states of Chihuahua and Sonora, Mexico. It also crossed into Arizona, along the San Bernardino and Santa Cruz rivers, breeding on both sides of the international boundary line. Five or six specimens including adults of both sexes and young recently from the nest, were collected in Arizona, and are now in the United States National Museum.—*Edgar A. Mearns.*

A new Cypripedium.

Cypripedium veganum, n. sp.—Allied to *C. pubescens* and *C. parviflorum*. Differs from both, but especially from *parviflorum*, by the oblong stigma, rounded and almost truncate at the end. Agrees with *pubescens* in the large flowers, but the lip is very bright yellow as in *parviflorum*. Leaves and stems glabrous, with only a few scattered gland-hairs. Flowers very slightly fragrant.

Upper sepals as long as the lip; lower much shorter; petals narrow, longer than the lip, usually twisted. Lip much inflated, laterally compressed, pubescent at base within, speckled with dull red within, faintly speckled on outside above towards the apex; sterile stamen triangular, spotted like the lip. Leaves lanceolate. Stems a foot to a foot-and-a-half high.

Measurements in millimeters:—Upper sepals, length 35–45; lower, length 32–40; breadth, (two united) 15–19; petals, length 45–57; greatest breadth, 7; lip, length, 33–41; breadth, 14–19; sterile stamen, length, 14, breadth, 6.

Leaves with about 6 prominent and 6 weaker veins; average of the larger leaves, length, 135, breadth, 40.

Hab.—Sapello Canyon, Las Vegas Range, N. M., about 8000 ft. (Canadian Zone); in full flower in June. Many specimens examined. The type will be placed in U. S. National Museum.—*T. D. A. Cockerell and P. and M. Barker.*

A new name for Mus obscurus Miller.

The name *Mus obscurus* which I recently applied to a small rat from Tioman Island, off the east coast of the Malay Peninsula (Proc. Washington Acad. Sci., II, p. 213, August 20, 1900) is preoccupied by *Mus obscurus* Waterhouse (Proc. Zool. Soc. London, V, p. 19, 1837). It may therefore be replaced by *Mus pullus.*—*Gerrit S. Miller, Jr.*

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TWO NEW SUBTERRANEAN CRUSTACEANS FROM THE UNITED STATES.

BY W. P. HAY.

During a recent visit to the Mammoth Cave of Kentucky, and Nickajack Cave in Tennessee, the writer was fortunate enough to obtain from the former twelve specimens of a small eyeless shrimp, and from the latter about as many specimens of an Isopod crustacean belonging to the genus *Cœcidotea* Packard.

The shrimp on examination proves to be so distinct from all the *Palæmonidæ* hitherto described as to necessitate the erection of a new genus. The Isopod, as it came from the type locality of *Cœcidotea nickajackensis* Packard was at first thought to be that species, but a careful comparison with Dr. Packard's description and figures and with specimens of *C. nickajackensis* from wells at Metcalf, Georgia, shows that it is distinct.

The new genus and the two new species may be described as follows:

Palæmonias gen. nov.

Similar to *Palæmonetes* in form and in the absence of a mandibular palpus. Gills four and a rudiment on each side. Rostrum long, slender

and serrate above and below. Antero-lateral margin of carapace with two spines. First two pairs of ambulatory appendages sub-equal in size and similar in form; chelate and with large bunches of pectinate bristles on the distal extremities of the fingers. The articulation of the hand with the carpal segment is at a point on the lower surface of the hand some distance from the proximal end; and the prominent knob-like extremity fits, when the limb is fully extended, into a broad sinus formed by the margin of a plate-like expansion of the carpus.

Palæmonias ganteri sp. nov.

Carapace about one third the total length, very thin and delicate. Rostrum as long as the antennal scale, its upper surface with about fourteen small teeth, lower surface with two or three teeth. Eye stalks rudimentary and without pigment. Antennules bi-flagellate. Antennæ longer than the body. Color in alcohol white; in life nearly transparent. Length about one inch and a quarter.

Named for Mr. H. C. Ganter, the manager of the cave, who through his deep interest in the scientific study of its fauna and flora was led to afford me exceptional facilities for making my investigations.

Cæcidotea richardsonæ sp. nov.

Body slender but broader than in either *C. stygia* or *C. nickajackensis*. Margins of the head, body segments and telson hairy. Antennules as long as the peduncle of the antennæ, the flagellum with fifteen segments. Antennæ long and very slender, the flagellum with about sixty-five segments. Legs much longer than in the other species of this genus. Uropods of nearly uniform diameter throughout, slender, about one half as long as the body and thickly beset with short stiff hairs.

Color in life and in alcohol white.

Named for Miss Harriet Richardson, whose papers on North American Isopods are well known.

VOL. XIV, PP. 181-182 DECEMBER 12, 1901

PROCEEDINGS

OF THE

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THE PROPER GENERIC NAMES OF THE VISCACHA, CHINCHILLAS, AND THEIR ALLIES.

BY J. A. ALLEN.

In a recent paper entitled, 'The Name of the Viscacha',* Mr. Oldfield Thomas leaves in doubt the proper allocation of the genus *Callomys* D'Orbigny and Geoffroy Saint-Hilaire. As the application of the generic names given to the different species of the Chinchillidæ is involved in some obscurity, a brief history of the case may serve to throw a little light on some of the intricate points.

The first distinctive generic name applied to any member of the group appears to be *Viscaccia* Schinz, given in 1825 to the Viscacha of the pampas of the La Plata. The next in order is the name *Lagostomus*, given by Brooks in 1828 to the same animal, which name thus becomes a synonym of *Viscaccia* Schinz. In 1829 Bennett used the name *Chinchilla* in a generic sense for the Chinchillas of the Chilian Andes. In 1830 Lichtenstein gave the name *Oriomys* also to the same animals. The other of the three generic groups of this family was named *Lagidium* by Meyen in March, 1833, and *Lagotis* by Bennett a few months later in the same year. Regarding the application of these names there is, apparently, no question. The

*Proc. Biol. Soc. Wash. XIV, p. 25, April 2, 1901.

case, however, is different with *Callomys* D'Orbigny and Geoffroy Saint-Hilaire mentioned above.

The authors of this genus included in it three species only, namely, *Callomys viscaccia*, *Callomys laniger*, and *Callomys aureus*. The first had already been assigned to the genus *Viscaccia* by Schinz, and upon the second the name *Chinchilla* had been bestowed by Brooks. This leaves the *Callomys aureus* only for consideration. *Callomys aureus* is based on furrier's skins, lacking the feet, the ears and the tail, and, of course, the skull; consequently the species may be treated as indeterminable and consequently *Callomys* is indeterminable. Waterhouse and others have considered *Callomys aureus* as referable to the genus *Lagidium*, but it would seem an unwarranted proceeding to displace *Lagidium* with the name *Callomys* on the basis of a species so imperfectly described as *C. aureus*. It hence seems proper to recognize for the three genera of the *Chinchillidæ* the names *Viscaccia*, *Chinchilla*, and *Lagidium*.

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NOTE ON THE NAMES OF A FEW SOUTH AMERICAN MAMMALS.

BY J. A. ALLEN.

A recent examination of G. Fischer's 'Zoognosia' (Vol. III, 1814), shows that a number of the names currently attributed to later authors originated with Fischer; also that a few of Fischer's names for South American mammals antedate those of Wied and Schinz. Among the former may be mentioned *Felis eyra*, *Nasua rufa*, and *Nasua fusca*, usually attributed to Desmarest, 1820, but all date from Fischer 1814; also *Dasypus villosus*, attributed to Desmarest 1819, dates from Fischer 1814. *Nasua socialis* Wied, 1826, is antedated by *Nasua sociabilis* Schinz, 1821.

Dasypus cilliatus Fischer, 1814, antedates *Dasypus patagonicus* Demarest 1819. This species will consequently stand as *Zaëdyus cilliatus* (G. Fischer).

A comparison of Schinz's 'Thierreich', 1821, with Wied's 'Reise nach Brasilien', 1822, and Wied's Beiträge zur Naturgeschicte von Brasilien' (II, 1826) shows that Schinz was the first to publish a number of the names attributed by him to Wied, and since thus generally accredited. Apparently not only Schinz, Kuhl, and Temminck had access to Wied's collections but in many cases adopted and published his manuscript names several years before Wied published them himself,

so that the author for the name is, in many cases, not Wied, as usually given, but Schinz, Kuhl, or Temminck. In some cases, however, the names used by these authors differ from those adopted later by Wied; for example, *Desmodus rufus* Wied is antedated by *Rhinolophus ecaudatus* Schinz, so that the name *Desmodus rufus* Wied should give place to *Desmodus ecaudatus* (Schinz). *Felis wiedi* Schinz, 1821, antedates *Felis macroura* Wied, 1826. *Canis azarae* Wied, 1826, is also antedated by *Canis brasiliensis* Schinz, 1821, although the name *Canis brasiliensis* is attributed by Schinz to "Neuwied". Schinz also employes the name *Felis brasiliensis* (ex Wied) for the Black Jaguar, previously named *Felis nigra* by Erxleben which Wied finally did not see fit to designate by a technical name. But *Felis brasiliensis* Schinz renders untenable *Felis brasiliensis* F. Cuvier, 1828, applied to another animal.

It may be further noted in this connection that in all probability *Vespertilio villosissimus* E. Geoffroy, 1807, based on the Chauve-souris septième of Azara, will have to be adopted for the Bat named *Vespertilio bonariensis* Lesson & Garnot, 1820, and now commonly known as *Lasiurus bonariensis*, but which should stand as *Lasiurus villosissimus*. That Azara's Chauve-souris septième is not referable to the *Lasiurus cinereus* group, as stated by Mr. Thomas (Ann. and Mag. Nat. Hist., (7) Vol. VIII, Nov., 1901, p. 435), is evident from its small size, which barely equals that of an average example of *L. borealis*.

As is well known, Dr. J. E. Gray gives many new names to mammals in Volume V (1827) of Griffith's 'Animal Kingdom', most of which are duly cited in synonomy, but some appear to have escaped notice. Gray divided the genus *Vampyrus* into three genera, which he named *Vampyrus*, *Istiophorus*, and *Tonatia*. *Vampyrus* is restricted to *V. spectrum; Istiophorus* is preoccupied by Lacépède for a genus of fishes, and has been replaced by Gray's latter name *Trachops; Tonatia* has for its type and only species *V. bidens* Spix, and is thus the exact equivalent of Mr. Thomas's subgenus *Vampyressa* (1900). These divisions of *Vampyrus* established by Gray in 1827 appear to have been overlooked by later systematic writers.*

*Since writing the above my attention has been called to the fact that Dr. T. S. Palmer, in 1898, called attention to Gray's treatment of *Vampyrus* (*cf.* Proc. Biol. Soc. Wash. XII, 1898, p. 111).

Another name proposed by Gray in the same work (Griffith's An. King. V, 1827, 228), is *Sicista*, which has as its type and only species *Mus subtilus* Pallas, which is also the type of the later *Sminthus* Keys. & Bl., 1840. The species currently referred to *Sminthus* will thus stand as follows: (1) *Sicista subtilus* (Pallas); (2) *Sicista concolor* (Büchn); (3) *Sicista lathemi* (Thomas); (4) *Sicista flavus* (True). It also follows that the subfamily named Sminthinæ must give place to Sicistinæ.

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SEVEN NEW BIRDS FROM PARAGUAY.

BY HARRY C. OBERHOLSER.

A small collection of birds from Sapucay, Paraguay, collected by Mr. William T. Foster for the United States National Museum contains the following apparently new species, descriptions of which, through the courtesy of the authorities of the National Museum, are here published. Full details of these together with various other critical notes will appear in a paper now in course of preparation.

Anabazenops acritus sp. nov.

Similar to *Anabazenops oleagineus* but decidedly darker, particularly below; the color throughout greenish olive instead of olive brown; the throat more yellowish; the light areas of the lower surface more greenish.

Leptopogon amaurocephalus icastus subsp. nov.

Similar to *Leptopogon amaurocephalus tristis*, but larger; less purely yellow below; crown rather more brownish; the wing-bands pale ochraceous; instead of clear yellow.

Arremon callistus sp. nov.

Similar to *Arremon polionotus* but upper parts darker; wings with hardly any indication of a greenish yellow humeral patch; edge of wing at bend, white; black jugular band wider.

Cyanocompsa sterea sp. nov.

Resembling *Cyanocompsa cyanea* but bill much smaller; blue of forehead less purplish; female much darker, less rufescent brown.

Thamnophilus ochrus sp. nov.

Resembles *Thamnophilus caerulescens*, but the female is very much paler both above and below, with the breast pale grayish ochraceous, the middle of abdomen buffy white, and all the superior wing-coverts black tipped with white.

Basileuterus leucoblepharus calus subsp. nov.

Similar to *Basileuterus leucoblepharus leucoblepharus*, but flanks grayish; crissum very pale yellowish; sides and breast heavily shaded with slate gray; back and rump less yellowish olive green.

Picolaptes tenuirostris apothetus subsp. nov.

Similar to *Picolaptes tenuirostris tenuirostris* but much smaller; the shaft streaks on back decidedly narrower.

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DIAGNOSES OF EIGHT NEW BATRACHIANS AND REPTILES FROM THE RIU KIU ARCHIPELAGO, JAPAN.

BY LEONHARD STEJNEGER.

BATRACHIA SALIENTIA.

Microhyla okinavensis new species.

Diagnosis.—Toes not dilated at tip, distinctly webbed at base; metatarsal tubercles rather large. Otherwise like *Microhyla fissipes*.

Habitat.—Okinawa Shima, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 25a.

Rana narina new species.

Diagnosis.—No glandular dorso-lateral fold; tips of toes dilated into very small discs much smaller than tympanum which is perfectly distinct; no free papilla on middle of tongue; toes more than half webbed; vomerine teeth in two nearly straight series between the choanæ; belly smooth; inner metatarsal tubercle narrow, very slightly prominent, less than one half the length of inner toe; no outer tubercle; tibiotarsal joint extends considerably beyond snout; snout long, nostrils near end of snout.

Habitat.—Okinawa Shima, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 19a.

Rana namiyei new species.

Diagnosis.—No glandular dorsol-lateral fold; tips of toes slightly dilated at tips; no free papilla on middle of tongue; lower jaw with a pair of tooth-like bony prominences in front; toes webbed to extreme tips; interorbital width much greater than width of eyelid; vomerine teeth in two rather large, very oblique groups behind the choanæ; inner metatarsal tubercle prominent, nearly as long as diameter of eye; fourth toe nearly one-third longer than fifth.

Habitat.—Okinawa Shima, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 31a.

Named for Mr. M. Namiye of the Imperial University, Tokyo.

Buergeria ijimæ new species.

Diagnosis.—Color brownish; fingers free; first finger longer than second; upper surface nearly smooth: tibia more than one-half the total length of head and body.

Habitat.—Okinawa Shima, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 19(914).

Named in honor of Prof. Isao Ijima, Imperial University, Tokyo.

Buergeria ishikawæ new species.

Diagnosis.—Color brownish; fingers free; first finger longer than second; upper surface excessively warty, the warts grouped in round clusters of smaller ones surrounding a larger; tibia not more than one-half the total length of head and body.

Habitat.—Okinawa Shima, Riu Kiu Archipelago.

Type.—National Museum, Uyeno Park, Tokyo, No. 30.

Named in honor of Prof. C. Ishikawa, of the Imperial University, Tokyo.

REPTILIA.

SAURIA.

Eumeces kishinouyei new species.

Diagnosis.—24 to 26 scale rows round the middle of the body; usually a post-nasal; first supralabial forming sutures with nasals and second labial only; two unpaired post-mentals; lower temporal of second row largest, wedge-shaped; soles with two series of enlarged tubercles be-

tween heel and base of third and fourth toes; normally three pairs of nuchals.

Habitat.—Islands of Yayeyama group, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 22.

Named for Dr. K. Kishinouye, Imperial Fisheries Bureau, Tokyo.

SERPENTES.

Calamaria pfefferi new species.

Diagnosis.—Four supralabials, first slightly shorter than second; first pair of infralabials forming a suture behind mental; no azygos shield between anterior chin-shields; frontal longer than broad, about four times as broad as supraocular; one preocular; tail pointed; subcaudals 15-26 pairs; no light or dark colored collar; no spot on upper side of tail; ventral surface light-colored with two irregular rows of very distinct dark brown spots; tail underneath with a median brown longitudinal band.

Scale-formula.—13 scale rows; 158–160 ventrals; $\frac{15}{15}$–$\frac{26}{26}$ subcaudals.

Habitat.—Miyako Shima, Yayeyama group, Riu Kiu Archipelago.

Type.—Science College Museum, Tokyo, No. 14.

Named in honor of Dr. G. Pfeffer, curator in the Natural History Museum, Hamburg.

Disteira orientalis new species.

Diagnosis.—Maxillary teeth all grooved; two pairs of chin-shields in contact; 23 to 25 scales round the neck, 32 to 35 round the body: frontal shield more than twice as long as broad, longer than its distance from rostral and equalling the parietals; a single anterior temporal; rostral slightly broader than deep; ventrals 326 to 341; one or two postoculars; scales strongly keeled; ventrals, except the most anterior ones, bituberculate. Yellow with black rings wider on the back and belly, and confluent on the anterior third of the latter into a black ventral band; head black with irregular yellow marks on anterior half and behind eyes.

Habitat.—Riu Kiu Seas.

Type.—Science College Museum, Tokyo, No. 29. Collected in Okinawa Shima.

Remarks.—I have examined two additional specimens in the Hamburg Museum (Nos. 2574, a-b) collected by Mr. Lenz on Iriomote Shima, Yayeyama group, on March 13, 1897. Also a specimen in the Leyden Museum (No. 1483) collected by von Siebold in "Japan".

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PROCEEDINGS

OF THE

BIOLOGICAL SOCIETY OF WASHINGTON

A NEW WHITE-FOOTED MOUSE FROM CALIFORNIA.

BY WILFRED H. OSGOOD.

The mouse here described is a slightly characterized form of the '*austerus-canadensis* group' which is one of several in the genus *Peromyscus* well known to be very much in need of thorough revision. Until such revision can be made it seems best to treat this form as a subspecies of *Peromyscus oreas** which is apparently its nearest relative. It occupies the humid coast strip of northern California, having a range coinciding with that of a number of mammals and birds belonging to groups which reach their highest development farther north. It is thus the only member of the *austerus-canadensis* group found within the State of California.

Peromyscus oreas rubidus subsp. nov.

Type from Mendocino City, Mendocino Co., California. No. 91,650 Biological Survey Coll., ♀ yg-ad. Collected Nov. 17, 1897 by J. A. Loring. Orig. No. 4,925.

Distribution.—Coast region of northern California and southern Oregon, extending south at least as far as Cazadero, California, or nearly through the redwood strip.

Characters.—Similar to *Peromyscus oreas* but with shorter tail and smaller hind foot; general color, particularly in summer, shades of ruddy brown or chocolate instead of shades of brown tinged with yellowish. Similar to *Peromyscus austerus* but somewhat larger and lighter in color. Skull similar to that of *P. oreas*, well distinguished from that of *P. austerus*.

Color.—*Type* (in worn summer pelage): Upperparts brownish fawn

* Bangs, Proc. Biol. Soc. Wash. XII, 83-84, Mar. 24, 1898.

with an evident dark median dorsal line, sides brownish fawn, being of a shade somewhat between the chocolate and fawn color of Ridgway (Pl. III, figs. 2 and 22); ears lightly edged with whitish, lanuginous tufts usually with a few white or whitish hairs; dark spot at base of whiskers nearly obsolete; underparts white; tail sharply bicolor.

Skull.—Not definitely distinguishable from that of *Peromyscus oreas;*† decidedly larger and heavier than in *P. austerus;* braincase fuller and wider; rostrum and infraorbital region heavier; audital bullæ larger.

Measurements.—Although the skull of *P. rubidus* is not appreciably smaller than that of *oreas* the hind foot is constantly smaller and the tail shorter. The following table indicates this difference.

Peromyscus oreas.

Number.	Sex.	Locality.	Length.	Tail.	Hind foot.
3,696‡	♀	Mt. Baker Range, B. C.	200	101	24
3,694‡	♂	" " " "	207	114	24
89,861	♀	Mt. Rainier, Wash.	206	112	24
89,863	♀	" " "	204	118	23
89,870	♀	" " "	210	117	23
90,077	♂	" " "	197	107	23
		Average, 6 adults.	204	111	23.5

Peromyscus oreas rubidus.

Number.	Sex.	Locality.	Length.	Tail.	Hind foot.
91,650	♀	Mendocino, Calif.	203	99	21
91,648	♀	" "	189	99	21
91,647	♂	" "	190	95	22
98,401	♀	Briceland, Calif.	200	100	22
98,402	♂	" "	180	90	21
97,232	♀	Hoopa Valley, Calif.	200	96	22
		Average, 6 adults	193	96	21.5

†In the series before me the nasals are very slightly longer in *oreas* than in *rubidus* but it does not seem safe to assume that this slight difference is constant.

‡Coll. of E. A. and O. Bangs.

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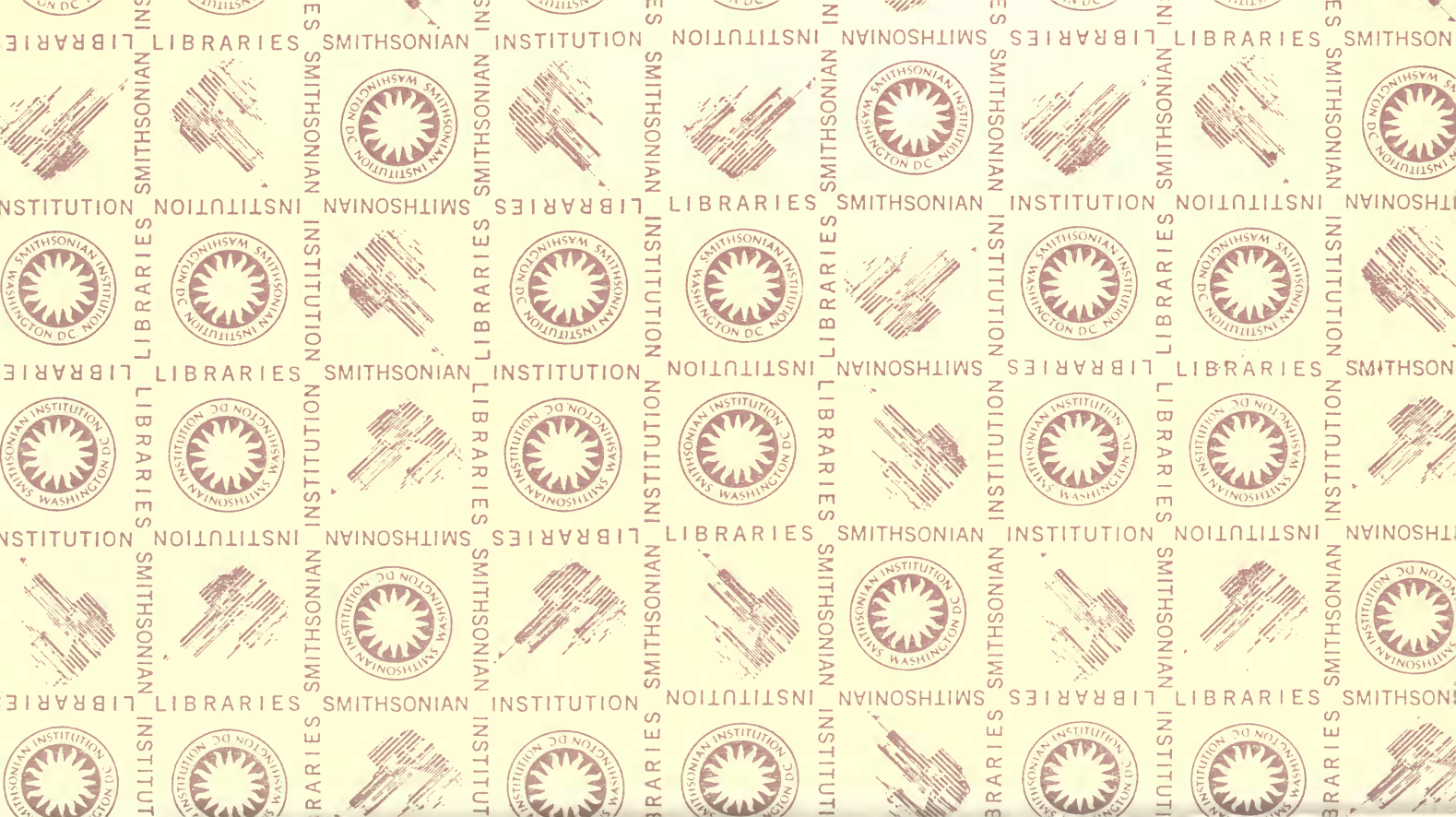
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